

03C0

00001	ABS	MTCHK001
00002	ORG /200	MTCHK002
00003	*****	*****
00004	* CHI MTCHK *** V1 M2 ***	MTCHK003
00005	*	MTCHK004
00006	* 20 MAR 78 - VINCE FLORIAN	MTCHK005
00007	*	MTCHK006
00008	* NOTES:	MTCHK007
00009	* XR3 = RETRY COUNT	MTCHK008
00010	* XR4 = ROUTINE NUMBER	MTCHK009
00011	* XR5 = STATUS WORD 1	MTCHK010
00012	* XR6 = STATUS WORD 2	MTCHK011
00013	*	MTCHK012
00014	* 3000 WAIT FOR MODE IN SWITCHES	MTCHK013
00015	* 3001 WAIT FOR XPORT TO REWIND	MTCHK014
00016	* 3006 WAIT FOR INTERRUPT (SELECT AND SENSE)	MTCHK015
00017	* 3007 WAIT FOR INTERRUPT (COMMAND CHAIN)	MTCHK016
00018	* 301E ILSW ERROR - ILSW BIT IS IN ACC	MTCHK017
00019	*	MTCHK018
00020	*****	MTCHK019
0200 00 658009D0	00021 TOP LDX I1 BR	MTCHK020
0202 00 6D000000	00022 STX L1 /0	MTCHK021
0204 00 65800901	00023 LOX I1 BR+1	MTCHK022
0206 00 6D000004	00024 STX L1 /4	MTCHK023
0208 00 6500023C	00025 LOX L1 INIT	MTCHK024
020A 00 6D000005	00026 STX L1 /5	MTCHK025
020C 00 650004B7	00027 LDX L1 INT3	MTCHK026
020E 00 6D00000B	00028 STX L1 /B	MTCHK027
0210 00 650004CD	00029 LDX L1 INT4	MTCHK028
0212 00 6D00000C	00030 STX L1 /C	MTCHK029
00031	*****	MTCHK030
00032	* FILL WRITE BUFFER WITH VAR DATA	MTCHK031
00033	*****	MTCHK032
0214 00 5C451000	00034 RLD L2 /1000 LO XR2 W/BUFFER SIZE	MTCHK033
0216 00 C0009CE	00035 LDO L DATA GET THE DATA IN A AND Q	MTCHK034
0218 00 D6001FFF	00036 LP1 STO L2 WBUF-1	MTCHK035
021A 0 18C1	00037 RTE 1 SHIFT THE DATA	MTCHK036
021B 0 72FF	00038 MDX 2 -1 OROP THE WRITE BUF ADDRESS	MTCHK037
021C 0 70FB	00039 MDX LP1 FILL THE WRITE BUFFER	MTCHK038
021D 0 6300	00040 LOX 3 0 POINTER FOR MESSAGE 0	MTCHK039
021E 00 44000496	00041 BSI L TYPE GO TYPE MESSAGE 0	MTCHK040
0220 0 701B	00042 MDX INIT	MTCHK041
00043	*****	MTCHK042
00044	* THIS ROUTINE ENTERED FROM CONSOLE INTERRUPT	MTCHK043
00045	*****	MTCHK044
0221 0 631C	00046 CONS LOX 3 28 MESSAGE POINTER	MTCHK045
0222 00 44000496	00047 BSI L TYPE	MTCHK046
0224 00 C40009D4	00048 LO L PASS	MTCHK047
0226 00 44000486	00049 BSI L CONV	MTCHK048
0228 00 44000496	00050 BSI L TYPE	MTCHK049
022A 00 C40009D5	00051 LO L RETRY	MTCHK050
022C 00 44000486	00052 BSI L CONV	MTCHK051
022E 00 44000496	00053 BSI L TYPE	MTCHK052
0230 00 C4000906	00054 LO L FERRS GET FLAGGED ERROR COUNT	MTCHK053
0232 00 44000486	00055 BSI L CONV CONVERT FOR MESSAGE	MTCHK054
0234 00 44000496	00056 BSI L TYPE MSG	MTCHK055
0236 00 C4000907	00057 LD L CERRS GET READ COMPARE ERROR COUNT	MTCHK056
		MTCHK057

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0238 00 44000486 00058	BSI L CONV	MTCHK058	
023A 00 44000496 00059	BSI L TYPE	MTCHK059	
023C 0 6100 00060	INIT LDX 1 0	MTCHK060	
0230 00 60000904 00061	STX L1 PASS	ZERO COUNTER	MTCHK061
023F 00 6D000905 00062	STX L1 RETRY	ZERO COUNTER	MTCHK062
0241 00 60000906 00063	STX L1 FERRS	ZERO FLAGGED ERROR COUNT	MTCHK063
0243 00 60000907 00064	STX L1 CERRS	ZERO COMPARE ERROR COUNT	MTCHK064
0245 0 6301 00065	LOX 3 1	SET DISPLACEMENT POINTER	MTCHK065
0246 00 44000496 00066	BSI L TYPE	TYPE MESSAGE 1	MTCHK066
00067	*****	*****	MTCHK067
0248 0 3000 00068	WAIT 0	WAIT FOR MODE IN SWITCHES	MTCHK068
0249 00 44000496 00069	BSI L TYPE	TYPE MSG 2	MTCHK069
024B 00 0C0009CC 00070	XIO L ROSW	REAO SWITCHES	MTCHK070
0240 00 C400090F 00071	LO L SWIT	*****	MTCHK071
024F 00 5C740004 00072	RAND LA /0004	MASK ALL BUT MODE	MTCHK072
0251 00 04000902 00073	STO L MODE	*****	MTCHK073
0253 00 4C180258 00074	BZ TMSG4	*****	MTCHK074
0255 00 44000496 00075	BSI L TYPE	TYPE MSG 3 (PE MODE)	MTCHK075
0257 0 7003 00076	MDX REWO-1	GO REWIND TRANSPORTS	MTCHK076
0258 0 6304 00077	TMSG4 LOX 3 4	POINTER FOR MSG 4	MTCHK077
0259 00 44000496 00078	BSI L TYPE	GO TYPE MSG 4	MTCHK078
00079	*****	*****	MTCHK079
00080	*	REWIND ALL XPORTS AND HALT CONTROLLER	*
00081	*****	*****	MTCHK080
0258 0 6100 00082	LDX 1 0	*****	MTCHK081
025C 00 C4000902 00083	REWO LO L MODE	PUT IN XPORT NUMBER	MTCHK082
025E 0 5977 00084	ROR A 1	*****	MTCHK083
025F 00 040009E6 00085	STO L REW+1	*****	MTCHK084
0261 00 0C0009C4 00086	XIO L REAOY	REWIND XPORT	MTCHK085
0263 0 3001 00087	WAIT 1	WAIT FOR SELECT INTERRUPT	MTCHK086
0264 00 C4000AA5 00088	LO L SENSE+1	GET STATUS WORD 2	MTCHK087
0266 0 1005 00089	SLA 5	SEE IF REWINDING	MTCHK088
0267 00 442802DB 00090	BSI L PRGIN,+2	IF NEG, WAIT FOR PROG INT	MTCHK089
0269 00 0C0009C2 00091	XIO L HALT	HALT CONTROLLER	MTCHK090
026B 00 5C750003 00092	RLD LA /3	SEE IF ALL XPORTS DONE	MTCHK091
0260 0 5976 00093	REOR A 1	*****	MTCHK092
026E 00 04000903 00094	STO L XPORT	*****	MTCHK093
0270 00 4C180276 00095	BZ CKDR+2	IF DONE, GO CHK XPORTS	MTCHK094
0272 0 7101 00096	MOX 1 +1	INCREMENT XPORT NUMBER	MTCHK095
0273 0 70E8 00097	MOX REWD	GO DO THE REST	MTCHK096
00098	*****	*****	MTCHK097
00099	*	*****	MTCHK098
00100	*	CHECK FOR NEXT AVAILABLE TAPE DRIVE	MTCHK099
00101	*	*****	MTCHK100
00102	*****	*****	MTCHK101
0274 00 74010903 00103	CKDR MOM L XPORT,+1	*****	MTCHK102
0276 00 C40009D3 00104	LD L XPORT	NOW LIMIT IT	MTCHK103
0278 00 5C740003 00105	RANO LA /3	TO 0 THRU 3	MTCHK104
027A 00 04000903 00106	STO L XPORT	PUT IT BACK	MTCHK105
027C 00 EC0009D2 00107	OR L MODE	NOW COMBINE IT AND	MTCHK106
027E 00 D40009ED 00108	STO L SELCT+1	PUT IT IN COMMAND WORD	MTCHK107
0280 00 670009EC 00109	LDX L3 SELCT	SELECT COMMAND	MTCHK108
0282 00 6F0009BC 00110	STX L3 START	*****	MTCHK109
0284 00 0C0009BC 00111	XIO L START	NOW GO CHECK IT	MTCHK110

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0286 0 3006	00112	WAIT	6	WAIT FOR INTERRUPT	MTCHK112	
0287 00 C4000AA5	00113	LO	L	SENSE+1	MTCHK113	
0289 00 4C280274	00114	BN	CKDR	IF NOT AVAIL GO CHK NEXT	MTCHK114	
	00115	*****				MTCHK115
	00116	* SET UP EXPECTED WORD 2 WITH MOOE AND XPORT NUMBER				MTCHK116
	00117	*****				MTCHK117
028B 0 6118	00118	LOX	1	24	NUMBER OF ROUTINES	MTCHK118
028C 00 C4000902	00119	LD	L	MOOE	MTCHK119	
028E 00 4C180292	00120	BZ	**2	IF ZERO, DON'T PUT IN PE BIT	MTCHK120	
0290 00 5C771004	00121	ROR	LA	/1004	PUT IN PE BITS	MTCHK121
0292 00 EC0009D3	00122	OR	L	XPORT	PUT IN XPORT NUMBER	MTCHK122
0294 0 5895	00123	RCPY	4	A	HOLD IN XR4	MTCHK123
0295 00 C500053A	00124	LP3	LO	L1 CWD2-1	GET STATUS CHECK WORD 2	MTCHK124
0297 00 5C74EFF8	00125	RAND	LA	/EFF8	MASK OUT OLD MOOE AND DRIVE	MTCHK125
0299 0 58F7	00126	ROR	A	4	PUT IN NEW MOOE AND DRIVE	MTCHK126
029A 00 D500053A	00127	STO	L1	CW02-1	PUT IT BACK	MTCHK127
029C 0 71FF	00128	MOX	1	-1	DROP COUNTER/pointer	MTCHK128
0290 0 70F7	00129	MOX	LP3			MTCHK129
	00130	*****				MTCHK130
	00131	*	SET UP FOR ROUTINE 0			MTCHK131
	00132	*****				MTCHK132
029E 00 60000908	00133	STX	L1	RTN	ZERO ROUTINE NUMBER	MTCHK133
02A0 00 660009F0	00134	LOX	L2	RTN0	GET ADR OF RTN 0	MTCHK134
02A2 00 6E0009BC	00135	STX	L2	START		MTCHK135

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00137	*****				MTCHK137	
00138	*				MTCHK138	
00139	*	XEQ MTA SUBROUTINE			MTCHK139	
00140	*				MTCHK140	
00141	*****				MTCHK141	
00142	*				MTCHK142	
02A4 0 5BF3	00143	AGAIN	RSUB	A A	ZERO ACC	
02A5 00 D4000AA4	00144	STD	L	SENSE	AND STATUS WORD 1	
02A7 00 D4000AA5	00145	STO	L	SENSE+1	AND STATUS WORD 2	
02A9 00 D40009E0	00146	STD	L	ILSW3	ZERO ILSW	
02A8 00 0C0009BC	00147	XIO	L	START	GIVE MTA XIO START	
02AD 0 3007	00148	WAIT	7		WAIT FOR INTERRUPT	
02AE 00 CC000AA4	00149	LDD	L	SENSE	GET STATUS WORDS 1 AND 2	
02B0 0 5885	00150	RCPY	5	A	PUT WORD 1 IN XR5	
02B1 0 18D0	00151	RTE	16		PUT WORD 2 IN XR6	
02B2 0 58D5	00152	RCPY	6	A		
02B3 00 C4000AA9	00153	LD	L	SENSE+5	GET RETRYS	
02B5 00 5C7400FF	00154	RAND	LA	/0OFF	SAVE ONLY THE RETRYS	
02B7 00 D40009D5	00155	STD	L	RETRY		
02B9 0 58E5	00156	RCPY	3	A	DISPLAY THE RETRY COUNT	
02B8 0 5821	00157	RINC	1		INCREMENT THE RECDRD COUNT	
02B8 00 668009D8	00158	LDX	I2	RTN	GET ROUTINE NUMBER IN POINTEMTCHK158	
02BD 0 5A15	00159	RCPY	4	2	DISPLAY ROUTINE NUMBER IN XRM	
02BE 0 5A75	00160	RCPY	A	2	MTCHK159	
02BF 00 441802DB	00161	BSI	L	PRGIN,+-	DISPLAY THE RETRY COUNT	
02C1 00 5C750007	00162	RLD	LA	7	GO WAIT FOR PROG INT	
02C3 0 5A76	00163	REOR	A	2	SEE IF RTN 7	
02C4 00 441802DB	00164	BSI	L	PRGIN,+-		
02C6 00 5C75000C	00165	RLD	LA	12	MTCHK160	
02C8 0 5A76	00166	REDR	A	2	SEE IF RTN 12	
02C9 00 441802DB	00167	BSI	L	PRGIN,+-	MTCHK161	
	00168	*****				MTCHK162
	00169	*	CHECK STATUS WORDS FDR ERRDRS			MTCHK163
	00170	*****				MTCHK164
02CB 00 C6000523	00171	LD	L2	CWD1	GET EXPECTED STATUS WORD 1	
02CD 0 59F6	00172	REOR	A	5	COMPARE WITH STATUS WORD 1	
02CE 00 D40009E2	00173	STO	L	8AD1	SAVE IT	
02D0 00 C600053B	00174	LD	L2	CWD2	GET EXPECTED STATUS WORD 2	
02D2 0 5AF6	00175	REOR	A	6	COMPARE WITH STATUS WORD 2	
02D3 00 D40009E3	00176	STO	L	BAD2	BAD BITS WILL BE USED BY FLG	
02D5 00 EC0009E2	00177	DR	L	8AD1	MTCHK176	
02D7 00 4C20038D	00178	BNZ	FLGER		TO FLAG BAD BITS IN MESSAGE	
02D9 00 4E80050B	00179	GO	BSC	I2 ROUTN	MTCHK177	
	00180	*****				IF NOT 0, GO TO FLAGGED ERRODMTCHK178
	00181	*	WAIT FOR PRDG INTERRUPT BEFORE CHECK STATUS WDS			MTCHK179
	00182	*****				GO TO CDRECT ROUTINE
02DB 0 0000	00183	PRGIN	DC	---	MTCHK180	
02DC 00 C40009E0	00184	LD	L	ILSW3	ENTRY POINT	
02DE 00 F40009DE	00185	EDR	L	H0200	GET ILSW	
02E0 00 4C2002DC	00186	BNZ	PRGIN+1		PRDG INT ILSW BIT 6	
02E2 00 D40009E0	00187	STO	L	ILSW3	MTCHK185	
02E4 00 4C8002DB	00188	BSC	I	PRGIN	WAIT FOR PROG INT	
	00189	*****				MTCHK186
	00190	*	ADVANCE ROUTINE AND SET ALT COMMAND ADDRESS			MTCHK187

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0342 00 04000909 00245	STO L WOROS	MTCHK245
0344 00 4C0002E6 00246	B L AOVAN	MTCHK246
0346 00 440003F8 00247	RUT13 BSI L RCOMP	MTCHK247
0348 00 C400090C 00248	LO L TWO	MTCHK248
034A 00 04000A87 00249	STO L RTN14+1	MTCHK249
034C 00 D4000ABC 00250	STO L RTN14+6	MTCHK250
034E 0 1801 00251	SRA 1	MTCHK251
034F 00 04000909 00252	STO L WOROS	MTCHK252
0351 00 4C0002E6 00253	B L AOVAN	MTCHK253
0353 00 440003F8 00254	RUT14 BSI L RCOMP	MTCHK254
0355 00 66800A87 00255	LOX I2 RTN14+1 GET BYTE COUNT	MTCHK255
0357 00 5C752000 00256	RLO LA /2000	MTCHK256
0359 0 5A76 00257	REOR A 2 SEE IF MAX BYTE COUNT (BUF	SMTCHK257
035A 00 4C1802E6 00258	BZ L ADVAN EXIT IF MAX (/2E0 RECORDS)	MTCHK258
035C 0 5A75 00259	RCPY A 2	MTCHK259
0350 00 B400090E 00260	CMP L H0200	MTCHK260
035F 0 7006 00261	MOX A010 IF GT	MTCHK261
0360 0 7001 00262	MOX A02 IF LT	MTCHK262
0361 0 7004 00263	MDX AD10 IF EQ	MTCHK263
0362 0 5A75 00264	A02 RCPY A 2 GET BYTE COUNT BACK	MTCHK264
0363 00 8400090C 00265	A L TWO	MTCHK265
0365 0 7002 00266	B AD10+2	MTCHK266
0366 00 84000900 00267	A010 A L H0010	MTCHK267
0368 00 D4000A87 00268	STO L RTN14+1	MTCHK268
036A 00 04000ABC 00269	STO L RTN14+6	MTCHK269
036C 0 1801 00270	SRA 1	MTCHK270
0360 00 04000909 00271	STO L WOROS	MTCHK271
036F 00 4C0002A4 00272	B L AGAIN	MTCHK272
0371 00 C400090A 00273	RUT15 LD L RECOS	MTCHK273
0373 0 5976 00274	REOR A 1	MTCHK274
0374 00 4C2002A4 00275	BNZ L AGAIN	MTCHK275
0376 00 C4000A98 00276	LO L RTN16+1 SET UP	MTCHK276
0378 0 1801 00277	SRA 1	MTCHK277
0379 00 D4000909 00278	STO L WORDS	MTCHK278
0379 00 4C0002E6 00279	B L AOVAN	MTCHK279
0370 00 440003F8 00280	RUT16 BSI L RCOMP	MTCHK280
037F 00 C400090A 00281	LD L RECOS	MTCHK281
0381 0 5976 00282	REOR A 1	MTCHK282
0382 00 4C2002A4 00283	BNZ L AGAIN	MTCHK283
0384 00 4C0002E6 00284	B L AOVAN	MTCHK284
0386 00 74010904 00285	RUT17 MOM L PASS,+1 INCREMENT PASS COUNT	MTCHK285
0388 0 1000 00286	NOP	MTCHK286
0389 0 5AF5 00287	RCPY A 6	MTCHK287
038A 0 1005 00288	SLA 5 SEE IF REWINDING	MTCHK288
038B 00 4C280274 00289	BN CKOR IF SO, GO CHECK NEXT XPORT	MTCHK289
00290	*****	MTCHK290
00291	*	**MTCHK291
00292	*	**MTCHK292
00293	*	**MTCHK293
00294	*****	**MTCHK294
038D 0 6958 00295	FLGER STX 1 REGF+1 SAVE REGS	MTCHK295
038E 0 6A59 00296	STX 2 REGF+3	MTCHK296
038F 0 6B5A 00297	STX 3 REGF+5	MTCHK297
0390 00 74010906 00298	MOM L FERRS,+1 INCREMENT FLAG ERR COUNT	MTCHK298

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0392 0 1000 00299	NOP	JUST IN CASE				MTCHK299	
0393 0 6311 00300	LDX 3 17	MSG 17 *** FLAGGED ERROR ***				MTCHK300	
0394 00 44000496 00301	BSI L	TYPE				MTCHK301	
0396 00 C40009D8 00302	LD L	RTN				MTCHK302	
0398 00 44000486 00303	BSI L	CONV				MTCHK303	
039A 00 44000496 00304	BSI L	TYPE				MTCHK304	
039C 0 6201 00305	LDX 2 1					MTCHK305	
039D 0 6104 00306	LDX 1 4					MTCHK306	
039E 0 59F5 00307	RCPY A 5	GET "WAS" WORD 1				MTCHK307	
039F 00 44000456 00308	BSI L	BITS				MTCHK308	
03A1 00 44000496 00309	BSI L	TYPE				MTCHK309	
03A3 0 6201 00310	LDX 2 1					MTCHK310	
03A4 0 6104 00311	LDX 1 4					MTCHK311	
03A5 0 5AF5 00312	RCPY A 6	GET "WAS" WORD 2				MTCHK312	
03A6 00 44000456 00313	BSI L	BITS				MTCHK313	
03A8 00 44000496 00314	BSI L	TYPE				MTCHK314	
03AA 00 668009D8 00315	LDX I2	RTN				MTCHK315	
03AC 00 C6000523 00316	LD L2	CWD1				GET "SHOULD BE" WORD 1	MTCHK316
03AE 0 6201 00317	LDX 2 1					MTCHK317	
03AF 0 6104 00318	LDX 1 4					MTCHK318	
03B0 00 44000456 00319	BSI L	BITS				MTCHK319	
03B2 00 44000496 00320	BSI L	TYPE				MTCHK320	
03B4 00 668009D8 00321	LDX I2	RTN				MTCHK321	
03B6 00 C6000538 00322	LD L2	CWD2				GET "SHOULD BE WORD 2	MTCHK322
03B8 0 6201 00323	LDX 2 1					MTCHK323	
03B9 0 6104 00324	LDX 1 4					MTCHK324	
03BA 00 44000456 00325	BSI L	BITS				MTCHK325	
03BC 00 44000496 00326	BSI L	TYPE				MTCHK326	
03BE 00 C40009E2 00327	LD L	BAD1				GET BAD BITS FROM STATUS WD	MTCHK327
03C0 0 6201 00328	LDX 2 1					MTCHK328	
03C1 0 6104 00329	LDX 1 4					MTCHK329	
03C2 00 4400046E 00330	BSI L	FLAGS				MTCHK330	
03C4 00 44000496 00331	BSI L	TYPE				MTCHK331	
03C6 00 C40009E3 00332	LD L	BAD2				MTCHK332	
03C8 0 6201 00333	LDX 2 1					MTCHK333	
03C9 0 6104 00334	LDX 1 4					MTCHK334	
03CA 00 4400046E 00335	BSI L	FLAGS				MTCHK335	
03CC 00 44000496 00336	BSI L	TYPE				MTCHK336	
03CE 00 C40009E4 00337	LD L	BAD5				MTCHK337	
03D0 00 4C1803E2 00338	BZ	EMSG				MTCHK338	
03D2 00 44000496 00339	BSI L	TYPE				MSG 25	MTCHK339
03D4 00 C4000AA8 00340	LD L	SENSE+4				GET "WAS" WORD 5	MTCHK340
03D6 00 44000486 00341	BSI L	CONV				MTCHK341	
03D8 00 44000496 00342	BSI L	TYPE				MSG 26	MTCHK342
03DA 00 5C7507EE 00343	RLD LA	/07EE				*SHOULD BE* WORD 5	MTCHK343
03DC 00 44000486 00344	BSI L	CONV				MTCHK344	
03DE 00 44000496 00345	BSI L	TYPE				MSG 27	MTCHK345
03E0 00 6D0009E4 00346	STX L1	BAD5				ZERO WORD 5 FLAG	MTCHK346
03E2 0 6307 00347	EMSG	LDX 3 7				MTCHK347	
03E3 00 44000496 00348	BSI L	TYPE				MSG 7	MTCHK348
03E5 00 5C250000 00349	REGF	RLD L1 **				RESTORE INDEX REGS	MTCHK349
03E7 00 5C450000 00350		RLD L2 **					MTCHK350
03E9 00 5C650000 00351		RLD L3 **					MTCHK351
03EB 00 C40009D8 00352		LD L RTN					MTCHK352

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03ED 0 5B95 00353	RCPY 4 A	DISPLAY ROUTINE NUMBER	MTCHK353
03EE 00 0C0009CC 00354	OPR XIO L RDSW	READ SWITCHES	MTCHK354
03F0 00 C40009DF 00355	LD L SWIT		MTCHK355
03F2 00 4C2802E6 00356	BN ADVAN	IF BIT 0, BYPASS ROUTINE	MTCHK356
03F4 0 1001 00357	SLA 1	IF BIT 1 IS ON, CONTINUE	MTCHK357
03F5 00 4C2802D9 00358	BN GO		MTCHK358
03F7 0 70F6 00359	MDX OPR	GO WAIT FOR OPERATOR	MTCHK359



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0443 00	5C250000	00415	REG	RLO	L1	***	RESTORE INDEX REGS	MTCHK415
0445 00	5C450000	00416		RLO	L2	***		MTCHK416
0447 00	5C650000	00417		RLO	L3	***		MTCHK417
0449 00	C40009D8	00418		LD	L	RTN		MTCHK418
044B 0	5B95	00419		RCPY	4	A	DISPLAY ROUTINE NUMBER	MTCHK419
044C 00	0C0009CC	00420	BYPAS	XID	L	ROSW	READ SWITCHES	MTCHK420
044E 00	C40009DF	00421		LO	L	SWIT		MTCHK421
0450 00	4C280407	00422		BN		NXT+2	BYPASS COMPARE IF BIT 0 DR	MTCHK422
0452 0	1001	00423		SLA		1	CHK BIT 1	MTCHK423
0453 00	4C280405	00424		BN		NXT	GD COMPARE NEXT WORD IF BIT	MTCHK424
0455 0	70F6	00425		MOX		BYPAS	OR GO WAIT FOR OPERATOR	MTCHK425
		00426					*****	MTCHK426
		00427	*				CONVERT BITS IN ACC TO BINARY AND PUT IN MSG	MTCHK427
		00428					*****	MTCHK428
0456 0	0000	00429	BITS	OC		**	ENTRY POINT	MTCHK429
0457 0	5B95	00430		RCPY	4	A	HOLD ACC IN XR4	MTCHK430
0458 00	4C28045D	00431		BN		UND		MTCHK431
045A 00	C40009AA	00432		LD	L	HEX	GET A "0"	MTCHK432
045C 0	7002	00433		MOX		SET		MTCHK433
045D 00	C40009AB	00434	UND	LD	L	HEX+1	GET A "1"	MTCHK434
045F 00	D6000000	00435	SET	STO	L2	**	ADR OF DEST IS SET UP BY "TYMTCHK435	
0461 0	7201	00436		MOX	2	1	INCREMENT POINTER FOR NEXT	BMTCHK436
0462 0	71FF	00437		MOX	1	-1	DRDP COUNTER	MTCHK437
0463 0	7007	00438		MDX		NBIT		MTCHK438
0464 0	5A75	00439		RCPY	A	2	CHECK FOR ENO OF WORD	MTCHK439
0465 00	5C760014	00440		REOR	LA	20		MTCHK440
0467 00	4C980456	00441		BSC	I	BITS,+-	IF 0, GO BACK TO CALLER	MTCHK441
0469 0	6104	00442		LDX	1	4	SET UP FOR NEXT 4 BITS	MTCHK442
046A 0	5841	00443		RINC	2		INCREMENT POINTER TO SKIP A	MTCHK443
046B 0	58F5	00444	NBIT	RCPY	A	4	GET BACK WHAT'S LEFT	MTCHK444
046C 0	1001	00445		SLA		1	SHIFT NEXT BIT INTO POSITION	MTCHK445
0460 0	70E9	00446		MOX		BITS+1		MTCHK446
		00447					*****	MTCHK447
		00448	*				SUBROUTINE TO CONVERT BAD STATUS WORD BITS	MTCHK448
		00449	*				TO A '*' AND PUT IN MSG TD TYPE	MTCHK449
		00450					*****	MTCHK450
046E 0	0000	00451	FLAGS	DC		***	ENTRY POINT	MTCHK451
046F 0	5B95	00452		RCPY	4	A	HOLD ACC IN XR 4	MTCHK452
0470 00	4C280475	00453		BN		ERBIT		MTCHK453
0472 00	C40009BA	00454		LO	L	SPACE	GET A SPACE CHAR	MTCHK454
0474 0	7002	00455		MOX		SETA		MTCHK455
0475 00	C40009BB	00456	ERBIT	LD	L	SPACE+1	GET A FLAG (*)	MTCHK456
0477 00	D6000000	00457	SETA	STO	L2	**	ADR INSERTED BY *TYPE*	MTCHK457
0479 0	7201	00458		MDX	2	1	STEP POINTER	MTCHK458
047A 0	71FF	00459		MOX	1	-1	DROP COUNTER	MTCHK459
0478 0	7007	00460		MOX		NXBIT	GO CHK NEXT BIT	MTCHK460
047C 0	5A75	00461		RCPY	A	2		MTCHK461
047D 00	5C760014	00462		REOR	LA	20	CHK IF DONE	MTCHK462
047F 00	4C98046E	00463		BSC	I	FLAGS,+-		MTCHK463
0481 0	6104	00464		LDX	1	4		MTCHK464
0482 0	5841	00465		RINC	2			MTCHK465
0483 0	58F5	00466	NXBIT	RCPY	A	4	GET BACK WHAT'S LEFT	MTCHK466
0484 0	1001	00467		SLA		1		MTCHK467
0485 0	70E9	00468		MDX		FLAGS+1		MTCHK468

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	00469	*****				MTCHK469		
	00470	* CDNV ACC TO HEX 8 BITS + PUT IN MESSAGE				MTCHK470		
	00471	*****				MTCHK471		
0486 0	0000	00472	CDNV	DC	***	ENTRY POINT	MTCHK472	
0487 0	6104	00473	LDX	1	4	4 = ND OF CHAR TD CDNV	MTCHK473	
0488 0	5895	00474	RCPY	4	A	HDLO DATA IN XR 4	MTCHK474	
0489 00	5C74000F	00475	RAND	LA	/000F	KEEP ONLY RIGHT FOUR BITS	MTCHK475	
048B 0	58C5	00476	RCPY	2	A	PUT BITS IN POINTER AND	MTCHK476	
048C 00	C60009AA	00477	LD	L2	HEX	GET CDNVERTED CHAR AND	MTCHK477	
048E 00	05000000	00478	SETUP	STO	L1	***	PUT IN MESSAGE	MTCHK478
0490 0	58F5	00479	RCPY	A	4	GET BACK WHAT'S LEFT	MTCHK479	
0491 0	1804	00480	SRA	4		SHIFT DUT THE USED 8BITS	MTCHK480	
0492 0	71FF	00481	MOX	1	-1	DRDP THE COUNTER	MTCHK481	
0493 0	70F4	00482	MOX	CONV+2		GO OO THE REST, IF ANY	MTCHK482	
0494 00	4C800486	00483	BSC	I	CONV	GO BACK TO CALLER	MTCHK483	
	00484	*****				*****	MTCHK484	
	00485	*				*	MTCHK485	
	00486	*	TYPE	MESSAGE	ON VDT	*	MTCHK486	
	00487	*				*	MTCHK487	
	00488	*****				*****	MTCHK488	
0496 0	0000	00489	TYPE	OC	***	ENTRY POINT	MTCHK489	
0497 00	C7000553	00490	LD	L3	MSG	GET ADR OF MSG TD TYPE	MTCHK490	
0499 00	D40009CA	00491	STD	L	VDT	PUT IN IOCC	MTCHK491	
0498 00	C7000554	00492	LO	L3	MSG+1	ADR FOR CONVERTEO SWITCHES	MTCHK492	
049D 0	5872	00493	ROEC	A			MTCHK493	
049E 00	D400048F	00494	STO	L	SETUP+1	PUT IN CONVERSION RTN FDR LAM	MTCHK494	
04A0 00	04000460	00495	STO	L	SET+1		MTCHK495	
04A2 00	04000478	00496	STD	L	SETA+1		MTCHK496	
04A4 00	C7000574	00497	LO	L3	CNT	GET CHAR CT OF MSG TO TYPE	MTCHK497	
04A6 0	58A5	00498	RCPY	1	A	PUT IT IN COUNTER	MTCHK498	
04A7 0	5BF3	00499	WRITE	RSUB	AA	CLEAR ACC	MTCHK499	
04AB 00	D40009DB	00500	STO	L	RFLAG	CLEAR RESPONSE FLAG	MTCHK500	
04AA 00	0C0009CA	00501	XIO	L	VDT	WRITE CHAR TO VDT	MTCHK501	
04AC 00	740109CA	00502	MDM	L	VDT,+1	INCREMENT ADDRESS FOR NEXT	CMTCHK502	
04AE 00	C40009D8	00503	RESP	LD	L	RFLAG	CHK FOR VDT RESPONSE	MTCHK503
04B0 0	4810	00504	SKP	-		SKIP IF NEG	MTCHK504	
04B1 0	70FC	00505	MDX	RESP		OR GO CHECK IT AGAIN	MTCHK505	
04B2 0	71FF	00506	MDX	1	-1	DROP COUNTER	MTCHK506	
04B3 0	70F3	00507	MDX	WRITE		TYPE NEXT CHAR	MTCHK507	
04B4 0	7301	00508	MDX	3	+1	STEP TABLE DISP PDINTER	MTCHK508	
04B5 00	4C800496	00509	BSC	I	TYPE	GD BACK TD CALLER	MTCHK509	
	00510	*****				*****	MTCHK510	
	00511	*				*	MTCHK511	
	00512	*	INTERRUPT	SUBROUTINES		*	MTCHK512	
	00513	*				*	MTCHK513	
	00514	*****				*****	MTCHK514	
04B7 0	0000	00515	INT3	DC	***	ENTRY POINT LVL 3 (MTA)	MTCHK515	
04B8 0	4023	00516	BSI	SAVE			MTCHK516	
04B9 00	0C0009C6	00517	XIO	L	SILSW		MTCHK517	
04BB 00	D40009E0	00518	STD	L	ILSW3	SAVE IT	MTCHK518	
04BD 0	1005	00519	SLA	5		CHK FOR END OP BIT 5	MTCHK519	
04BE 00	4C2B04C8	00520	BN	ENDOP		GO RESET IT	MTCHK520	
04C0 0	1001	00521	SLA	1		DR CHK FDR PRDG INT BIT 6	MTCHK521	
04C1 00	4C2B04C6	00522	BN	PROG		GO RESET IT	MTCHK522	

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04C3	00	C40009E0	00523		L0	L	ILSW3	GET ILSW BACK	MTCHK523
04C5	0	301E	00524		OC		/301E	ILSW ERROR WAIT	MTCHK524
04C6	00	0C0009C0	00525	PROG	XIO	L	RSTPR	RESET PROG INT	MTCHK525
04C8	00	0C0009BE	00526	ENOOP	XIO	L	RST	RESET ENOOP INT	MTCHK526
04CA	0	4018	00527		BSI		RESTO	RESTORE REGS	MTCHK527
04CB	00	4CC004B7	00528		BOSC	I	INT3	GO BACK	MTCHK528
			00529	*					MTCHK529
04C0	0	0000	00530	INT4	DC		***	ENTRY POINT LVL 4 (CDNS OR	VMTCHK530
04CE	0	4000	00531		BSI		SAVE		MTCHK531
04CF	00	0C0009C8	00532		XIO	L	SOWR	RESET THE INTERRUPT	MTCHK532
0401	00	0400090B	00533		STO	L	RFLAG	SET RESPONSE FLAG	MTCHK533
04D3	0	1002	00534		SLA		2		MTCHK534
0404	0	4810	00535		SKP		-	SKIP IF CONSOLE INTERRUPT	MTCHK535
0405	0	7003	00536		MDX		TUBE	OR GO SERVICE VOT	MTCHK536
04D6	0	400C	00537		BSI		RESTO		MTCHK537
0407	00	4C400221	00538		BOSC	L	CONS	GO CHANGE MODE	MTCHK538
0409	0	4009	00539	TUBE	BSI		RESTO		MTCHK539
040A	00	4CC004C0	00540		BOSC	I	INT4	GO BACK	MTCHK540
			00541	*****					MTCHK541
040C	0	0000	00542	SAVE	OC		***	ENTRY POINT	MTCHK542
04D0	0	0810	00543		STO		SAVA	SAVE ACC, EXT, XR1, 2, 3...	MTCHK543
04DE	0	6911	00544		STX	1	XR1		MTCHK544
040F	0	6A11	00545		STX	2	XR2		MTCHK545
04E0	0	6B11	00546		STX	3	XR3		MTCHK546
04E1	00	4C80040C	00547		BSC	I	SAVE	GO BACK TO CALLER	MTCHK547
			00548	*****					MTCHK548
04E3	0	0000	00549	RESTO	DC		***	ENTRY POINT	MTCHK549
04E4	00	658004F0	00550		LDX	I1	XR1	RESTORE XR1, 2, 3, ACC AND	EMTCHK550
04E6	00	668004F1	00551		LDX	I2	XR2		MTCHK551
04E8	00	678004F2	00552		LDX	I3	XR3		MTCHK552
04EA	0	C803	00553		LOO		SAVA		MTCHK553
04EB	00	4C8004E3	00554		BSC	I	RESTO	GO BACK TO CALLER	MTCHK554
			00555	*****					MTCHK555
04EE	0000	00556		BSS	E	0		SAVE THIS AREA FOR REGS	MTCHK556
04EE	0	0000	00557	SAVA	OC		***		MTCHK557
04EF	0	0000	00558		DC		***		MTCHK558
04F0	0	0000	00559	XR1	OC		***		MTCHK559
04F1	0	0000	00560	XR2	OC		***		MTCHK560
04F2	0	0000	00561	XR3	OC		***		MTCHK561
			00562	*****					MTCHK562
			00563	*****	TABLES				MTCHK563
			00564	*****					MTCHK564
04F3	0	09F0	00565	RTNAD	DC		RTN0	ADDRESS FOR ALT COMMAND CHAIN	MTCHK565
04F4	0	09F7	00566		OC		RTN1		MTCHK566
04F5	0	09F8	00567		OC		RTN2		MTCHK567
04F6	0	09FF	00568		OC		RTN3		MTCHK568
04F7	0	0A03	00569		DC		RTN4		MTCHK569
04F8	0	0A07	00570		DC		RTN5		MTCHK570
04F9	0	0A0B	00571		DC		RTN6		MTCHK571
04FA	0	0A0F	00572		DC		RTN7		MTCHK572
04FB	0	0A15	00573		DC		RTN8		MTCHK573
04FC	0	0A22	00574		DC		RTN9		MTCHK574
04FD	0	0A2C	00575		DC		RTNA		MTCHK575
04FE	0	0A30	00576		DC		RTNB		MTCHK576

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04FF	0	0A35	00577	DC	RTNC		MTCHK577
0500	0	0A4D	00578	DC	RTND		MTCHK578
0501	0	0A59	00579	DC	RTNE		MTCHK579
0502	0	0A61	00580	DC	RTNF		MTCHK580
0503	0	0A68	00581	DC	RTN10		MTCHK581
0504	0	0A6D	00582	DC	RTN11		MTCHK582
0505	0	0A74	00583	DC	RTN12		MTCHK583
0506	0	0A81	00584	DC	RTN13		MTCHK584
0507	0	0A86	00585	DC	RTN14		MTCHK585
0508	0	0A90	00586	DC	RTN15		MTCHK586
0509	0	0A97	00587	DC	RTN16		MTCHK587
050A	0	0A9E	00588	DC	RTN17		MTCHK588
0508	0	02F2	00589	RDUTN	DC	RUTO ADDRESS OF RUTO	MTCHK589
050C	0	02F4	00590	DC	RUT1		MTCHK590
050D	0	02F6	00591	DC	RUT2		MTCHK591
050E	0	02F8	00592	DC	RUT3		MTCHK592
050F	0	02FA	00593	DC	RUT4		MTCHK593
0510	0	02FC	00594	DC	RUT5		MTCHK594
0511	0	02FE	00595	DC	RUT6		MTCHK595
0512	0	0300	00596	DC	RUT7		MTCHK596
0513	0	0302	00597	DC	RUT8		MTCHK597
0514	0	0304	00598	DC	RUT9		MTCHK598
0515	0	0308	00599	DC	RUTA		MTCHK599
0516	0	0311	00600	DC	RUTB		MTCHK600
0517	0	0328	00601	DC	RUTC		MTCHK601
0518	0	032D	00602	DC	RUTD		MTCHK602
0519	0	0331	00603	DC	RUTE		MTCHK603
051A	0	0339	00604	DC	RUTF		MTCHK604
051B	0	033B	00605	DC	RUT10		MTCHK605
051C	0	033D	00606	DC	RUT11		MTCHK606
051D	0	033F	00607	DC	RUT12		MTCHK607
051E	0	0346	00608	DC	RUT13		MTCHK608
051F	0	0353	00609	DC	RUT14		MTCHK609
0520	0	0371	00610	DC	RUT15		MTCHK610
0521	0	037D	00611	DC	RUT16		MTCHK611
0522	0	0386	00612	DC	RUT17		MTCHK612
0523	0	4000	00613	CWD1	DC /4000	CHECK WORD FOR STATUS WD 1	MTCHK613
0524	0	4000	00614	DC	/4000	FDR RTN 1	MTCHK614
0525	0	4000	00615	DC	/4000	FOR RTN 2	MTCHK615
0526	0	4000	00616	DC	/4000	3	MTCHK616
0527	0	4000	00617	DC	/4000	4	MTCHK617
0528	0	C040	00618	DC	/C040	5	MTCHK618
0529	0	4000	00619	DC	/4000	6	MTCHK619
052A	0	4000	00620	DC	/4000	7	MTCHK620
052B	0	4000	00621	DC	/4000	8	MTCHK621
052C	0	4000	00622	DC	/4000	9	MTCHK622
052D	0	4000	00623	DC	/4000	A	MTCHK623
052E	0	4000	00624	DC	/4000	B	MTCHK624
052F	0	4000	00625	DC	/4000	C	MTCHK625
0530	0	4000	00626	DC	/4000	D	MTCHK626
0531	0	C800	00627	DC	/C800	E	MTCHK627
0532	0	C840	00628	DC	/C840	F	MTCHK628
0533	0	C010	00629	DC	/C010	10	MTCHK629
0534	0	C820	00630	DC	/C820	11	MTCHK630

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0535 0	4000	00631	DC	/4000	12	MTCHK631
0536 0	4000	00632	DC	/4000	13	MTCHK632
0537 0	4000	00633	DC	/4000	14	MTCHK633
0538 0	4000	00634	DC	/4000	15	MTCHK634
0539 0	4000	00635	DC	/4000	16	MTCHK635
053A 0	4000	00636	DC	/4000	17	MTCHK636
053B 0	2370	00637	CWD2	DC /2370	RTN 0, EXPECTED STATUS WDRD	MTCHK637
053C 0	0310	00638	DC	/0310	1	MTCHK638
053D 0	0310	00639	DC	/0310	2	MTCHK639
053E 0	0310	00640	DC	/0310	3	MTCHK640
053F 0	0320	00641	DC	/0320	4	MTCHK641
0540 0	2320	00642	DC	/2320	5	MTCHK642
0541 0	2320	00643	DC	/2320	6	MTCHK643
0542 0	0600	00644	DC	/0600	7	MTCHK644
0543 0	0320	00645	DC	/0320	8	MTCHK645
0544 0	0320	00646	DC	/0320	9	MTCHK646
0545 0	0320	00647	DC	/0320	A	MTCHK647
0546 0	0340	00648	DC	/0340	B	MTCHK648
0547 0	0600	00649	DC	/0600	C	MTCHK649
0548 0	0340	00650	DC	/0340	D	MTCHK650
0549 0	0320	00651	DC	/0320	E	MTCHK651
054A 0	0320	00652	DC	/0320	F	MTCHK652
054B 0	0320	00653	DC	/0320	10	MTCHK653
054C 0	0320	00654	DC	/0320	11	MTCHK654
054D 0	0310	00655	DC	/0310	12	MTCHK655
054E 0	0320	00656	DC	/0320	13	MTCHK656
054F 0	0340	00657	DC	/0340	14	MTCHK657
0550 0	0310	00658	DC	/0310	15	MTCHK658
0551 0	0320	00659	DC	/0320	16	MTCHK659
0552 0	0600	00660	DC	/0600	17	MTCHK660
		00661	*****			
		00662	*		*	MTCHK662
		00663	*	TABLE OF ADDRESSES AND CHAR COUNTS OF MSGS	*	MTCHK663
		00664	*		*	MTCHK664
		00665	*****			

0553 0	0595	00666	MSG	DC	MSG0	ADDRESS OF MESSAGE 0	MTCHK666
0554 0	071F	00667	DC		MSG1		MTCHK667
0555 0	0757	00668	DC		MSG2		MTCHK668
0556 0	0766	00669	DC		MSG3		MTCHK669
0557 0	0784	00670	DC		MSG4		MTCHK670
0558 0	07A4	00671	DC		MSG5		MTCHK671
0559 0	07C7	00672	DC		MSG6		MTCHK672
055A 0	07CD	00673	DC		MSG7		MTCHK673
055B 0	0800	00674	DC		MSG8		MTCHK674
055C 0	0806	00675	DC		MSG9		MTCHK675
055D 0	0813	00676	DC		MSG10		MTCHK676
055E 0	081F	00677	DC		MSG11		MTCHK677
055F 0	0824	00678	DC		MSG12		MTCHK678
0560 0	0825	00679	DC		MSG13		MTCHK679
0561 0	0826	00680	DC		MSG14		MTCHK680
0562 0	0827	00681	DC		MSG15		MTCHK681
0563 0	0828	00682	DC		MSG16		MTCHK682
0564 0	0829	00683	DC		MSG17		MTCHK683
0565 0	0849	00684	DC		MSG18		MTCHK684

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0566	0	0860	00685	DC	MSG19	MTCHK685
0567	0	087C	00686	DC	MSG20	MTCHK686
0568	0	08A2	00687	DC	MSG21	MTCHK687
0569	0	08BE	00688	DC	MSG22	MTCHK688
056A	0	08E4	00689	DC	MSG23	MTCHK689
056B	0	0900	00690	DC	MSG24	MTCHK690
056C	0	0914	00691	DC	MSG25	MTCHK691
056D	0	0924	00692	DC	MSG26	MTCHK692
056E	0	0930	00693	DC	MSG27	MTCHK693
056F	0	0935	00694	DC	MSG28	MTCHK694
0570	0	095C	00695	DC	MSG29	MTCHK695
0571	0	0974	00696	DC	MSG30	MTCHK696
0572	0	098C	00697	DC	MSG31	MTCHK697
0573	0	09A4	00698	DC	MSG32	MTCHK698
0574	0	018A	00699	CNT	394 CHAR COUNT OF MSG 0	MTCHK699
0575	0	0038	00700	DC	56	1
0576	0	000F	00701	DC	15	2
0577	0	001E	00702	DC	30	3
0578	0	0020	00703	DC	32	CHAR COUNT DF MSG 4
0579	0	0023	00704	DC	35	CHAR COUNT DF MSG 5
057A	0	0006	00705	DC	6	6
057B	0	0033	00706	DC	51	7
057C	0	0006	00707	DC	6	8
057D	0	000D	00708	DC	13	9
057E	0	000C	00709	DC	12	10
057F	0	0005	00710	DC	5	11
0580	0	0001	00711	DC	1	12
0581	0	0001	00712	DC	1	13
0582	0	0001	00713	DC	1	14
0583	0	0001	00714	DC	1	15
0584	0	0001	00715	DC	1	16
0585	0	0020	00716	DC	32	17
0586	0	0017	00717	DC	23	18
0587	0	001C	00718	DC	28	19
0588	0	0026	00719	DC	38	20
0569	0	001C	00720	DC	28	21
058A	0	0026	00721	DC	38	22
058B	0	001C	00722	DC	28	23
058C	0	0014	00723	DC	20	24
058D	0	0010	00724	DC	16	25
058E	0	000C	00725	DC	12	26
058F	0	0005	00726	DC	5	27
0590	0	0027	00727	DC	39	28
0591	0	0018	00728	DC	24	29
0592	0	0018	00729	DC	24	30
0593	0	0018	00730	DC	24	31
0594	0	0006	00731	DC	6	32
		00732				*****
		00733	*			*****
		00734	*	MESSAGES FOR VDT		*****
		00735	*			*****
		00736				*****
0595	0022	00737	MSGO DMES	PTCHI MTCHK V1M2'R'R	MTCHK736	
05A6	0024	00738	DMES PROG	WILL CHECK CH	MTCHK737	MTCHK738

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05B8	0024	00739	OMES	I MAG TAPE ADAPT DR	* MTCHK739
05CA	0020	00740	OMES	ANO TRANSPORT *R *	MTCHK740
05DA	0020	00741	DMES	ALL STATUS WORDO *	MTCHK741
05EA	0020	00742	DMES	AND DATA ERRORS *	MTCHK742
05FA	0020	00743	OMES	WILL BE LOGGED *R *	MTCHK743
060A	0024	00744	DMES	RUNN TIME FDR 1 PAS *	MTCHK744
061C	0020	00745	OMES	SON 1 XPORT IS *	MTCHK745
062C	0024	00746	DMES	APPROX 7 MINUTES *R *MTCHK746	
063E	0024	00747	OMES	TD CHANGE MODE DR *	MTCHK747
0650	0024	00748	DMES	RESTART ; PRESS CON *	MTCHK748
0662	0022	00749	OMES	SOLE INTERRUPT *R *R *	MTCHK749
0673	0024	00750	DMES	WAITS : R3006 - WAIT *MTCHK750	
0685	0024	00751	DMES	ING FOR INTERRUPT *MTCHK751	
0697	0024	00752	DMES	FRDM SELECT XPORT *R *MTCHK752	
06A9	0026	00753	OMES	3007 - WAITING FDR MTCHK753	
06BC	0024	00754	DMES	INTERRUPT FRDM CDM *MTCHK754	
06CE	0016	00755	OMES	MANO CHAIN *R *	MTCHK755
06D9	0024	00756	DMES	301E - ILSW ERROR ; *MTCHK756	
06EB	0024	00757	OMES	ILSW BIT IS IN AC *	MTCHK757
06FD	0022	00758	DMES	C'R'TBIT 5 IS ENOOP *MTCHK758	
070E	0022	00759	OMES	'R'TBIT 6 IS PROG'R'R *MTCHK759	
071F	0024	00760	MSG1	DMES ENTER MODE IN SW *MTCHK760	
0731	0026	00761	OMES	13 (ON = PE, DFF = MTCHK761	
0744	0002	00762	DMES	*	MTCHK762
0745	0024	00763	DMES	NRZI) - PRESS START *EMTCHK763	
0757	001E	00764	MSG2	OMES 'RMDDE ENTERED : *	MTCHK764
0766	0024	00765	MSG3	DMES PE - START CHI MAG *MTCHK765	
0778	0018	00766	DMES	TAPE CHECK'R'E *MTCHK766	
0784	0022	00767	MSG4	DMES NRZI - START CHI *	MTCHK767
0795	001E	00768	DMES	MAG TAPE CHECK'R'E *MTCHK768	
07A4	0022	00769	MSG5	DMES ***** DATA COMPARE *	MTCHK769
07B5	0024	00770	OMES	ERROR **** RDTUINE / *MTCHK770	
07C7	000C	00771	MSG6	OMES XXXX'R'R'E *MTCHK771	
07C0	0024	00772	MSG7	DMES TO CDNTINUE * TURN *MTCHK772	
07DF	0024	00773	OMES	DNSW 1; TO BYPASS *MTCHK773	
07F1	001E	00774	DMES	TURN ON SW 0'R'R'E *MTCHK774	
0800	000C	00775	MSG8	OMES WDRD //E *MTCHK775	
0806	001A	00776	MSG9	DMES XXXX WAS //E *MTCHK776	
0813	0018	00777	MSG10	DMES XXXX -- S/B //E *MTCHK777	
081F	000A	00778	MSG11	DMES XXXX'R'E *MTCHK778	
0824	0002	00779	MSG12	OMES XX'E *MTCHK779	
0825	0002	00780	MSG13	DMES XX'E *MTCHK780	
0826	0002	00781	MSG14	OMES XX'E *MTCHK781	
0827	0002	00782	MSG15	OMES XX'E *MTCHK782	
0828	0002	00783	MSG16	DMES XX'E *MTCHK783	
0829	0022	00784	MSG17	DMES 'R ***** FLAGGED *MTCHK784	
083A	001E	00785	DMES	ERRDR ***** RTN /'E *MTCHK785	
0849	0022	00786	MSG18	DMES XXXX'R STATUS WORDO *MTCHK786	
085A	000C	00787	DMES	1 WAS 'E *MTCHK787	
0860	001E	00788	MSG19	DMES XXXX XXXX XXXX XXXX *	MTCHK788
086F	001A	00789	DMES	XXXX -- 2 WAS 'E *MTCHK789	
087C	001E	00790	MSG20	DMES XXXX XXXX XXXX XXXX *	MTCHK790
088B	0022	00791	DMES	XXXX XXXX 'R WORDO *	MTCHK791
089C	000C	00792	DMES	1 S/B 'E *MTCHK792	

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08A2	001E	00793	MSG21	DMES	X X X X	X X X X	X X X X	*	MTCHK793
08B1	001A	00794		DMES	X X X X	-- 2	S / B	*E	MTCHK794
08BE	001E	00795	MSG22	DMES	X X X X	X X X X	X X X X	*	MTCHK795
08CD	000A	00796		DMES	X X X X	*R *			MTCHK796
08D2	0024	00797		DMES					*EMTCHK797
08E4	001E	00798	MSG23	DMES	+	+	+	+	MTCHK798
08F3	001A	00799		DMES	+	+	+		MTCHK799
0900	001E	00800	MSG24	DMES	+	+	+	+	MTCHK800
090F	000A	00801		DMES	+	+	+	*R *E	MTCHK801
0914	0020	00802	MSG25	DMES	B Y T E	C O U N T	W A S	//*E	MTCHK802
0924	0018	00803	MSG26	DMES	X X X X	-- S / B	//*E		MTCHK803
0930	000A	00804	MSG27	DMES	X X X X	*R *E			MTCHK804
0935	001E	00805	MSG28	DMES		M T C H K	I N T E R R	*	MTCHK805
0944	0020	00806		DMES	U P T E D	*R N U M B E R	O F	*	MTCHK806
0954	0010	00807		DMES	P A S S E S	/ *E			MTCHK807
095C	0020	00808	MSG29	DMES	X X X X	*R N U M B E R	O F	*	MTCHK808
096C	0010	00809		DMES	R E T R Y S	/ *E			MTCHK809
0974	001C	00810	MSG30	DMES	X X X X	*R F L A G G E D	*		MTCHK810
0982	0014	00811		DMES	E R R O R S	/ /*E			MTCHK811
098C	001C	00812	MSG31	DMES	X X X X	*R C O M P A R E	*		MTCHK812
099A	0014	00813		DMES	E R R O R S	/ /*E			MTCHK813
09A4	000C	00814	MSG32	DMES	X X X X	*R *E			MTCHK814
09AA	0020	00815	HEX	DMES	00112233445566778899AABCCDDEEFF*E				MTCHK815
09BA	0004	00816	SPACE	DMES	***E				MTCHK816
		00817			*****				MTCHK817
		00818	*					*	MTCHK818
		00819	*		I O C C * S			*	MTCHK819
		00820	*					*	MTCHK820
		00821			*****				MTCHK821
09BC	0000	00822	BSS	E 0					MTCHK822
09BC 0	09EC	00823	START	DC SELCT					MTCHK823
09BD 0	6800	00824	DC	/6800	XIO START FOR AREA 13 (MTA)				MTCHK824
09BE 0	0000	00825	RST	DC	***				MTCHK825
09BF 0	6860	00826	DC	/6860	RESET AREA 13				MTCHK826
09C0 0	0000	00827	RSTPR	DC	***				MTCHK827
09C1 0	6880	00828	DC	/6880	RESET PROG INT				MTCHK828
09C2 0	0000	00829	HALT	DC	***				MTCHK829
09C3 0	6870	00830	DC	/6870	HALT CONTROLLER				MTCHK830
09C4 0	09E5	00831	READY	DC	REW	REWIND COMMAND CHAIN			MTCHK831
09C5 0	6800	00832	DC	/6800	XIO START COMMAND				MTCHK832
09C6 0	0000	00833	SILSW	DC	***				MTCHK833
09C7 0	0300	00834	DC	/0300	SENSE ILSW				MTCHK834
09C8 0	0000	00835	SDWR	DC	***				MTCHK835
09C9 0	0F01	00836	DC	/0F01	RESET CONS INT AND VDT				MTCHK836
09CA 0	0000	00837	VDT	DC	***	MSG ADR IS PUT HERE			MTCHK837
09CB 0	0900	00838	DC	/0900	WRITE ASCII TO VDT				MTCHK838
09CC 0	09DF	00839	RDSW	DC	SWIT				MTCHK839
09CD 0	3A00	00840	DC	/3A00	READ THE DATA ENTRY SWITCHES	MTCHK840			
		00841	*****	CONSTANTS	*****	*****			MTCHK841
		00842	*						MTCHK842
09CE 0	6BDC	00843	DATA	DC	/6BDC	DATA TO PUT IN WBUF			MTCHK843
09CF 0	FF00	00844		OC	/FF00				MTCHK844
09D0 0	6004	00845	BR	DC	/6004	BRANCH INSTRUCTIONS			MTCHK845
09D1 0	4C00	00846		DC	/4C00				MTCHK846

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09D2	0	0000	00847	MODE DC	***	MTCHK847
09D3	0	0000	00848	XPDRT DC	***	MTCHK848
09D4	0	0000	00849	PASS DC	***	UPDATED AFTER A PASS DN A XPMTCCHK849
09D5	0	0000	00850	RETRY DC	***	UPDATED AFTER EACH CDMMRD CHAMTCHK850
09D6	0	0000	00851	FERRS DC	***	FLAGGED ERRDR COUNT MTCHK851
09D7	0	0000	00852	CERRS DC	***	COMPARE ERRDR COUNT MTCHK852
09D8	0	0000	00853	RTN DC	***	MTCHK853
09D9	0	0000	00854	WORDS DC	***	MTCHK854
09DA	0	0400	00855	RECDS DC	/400	MTCHK855
09DB	0	0000	00856	RFLAG DC	***	MTCHK856
09DC	0	0002	00857	TWO DC	/2	MTCHK857
09DD	0	0010	00858	H0010 DC	/10	MTCHK858
09DE	0	0200	00859	H0200 DC	/200	MTCHK859
09DF	0	0000	00860	SWIT DC	***	SWITCH STDRAGE MTCHK860
09E0	0	0000	00861	ILSW3 DC	***	ILSW SAVED MTCHK861
09E1	0	0000	00862	FIRST DC	***	SET PDS WHEN 1ST WORD COMPARE MTCHK862
09E2	0	0000	00863	BAD1 DC	***	8AD 8BITS FROM STATUS WD 1 MTCHK863
09E3	0	0000	00864	BAD2 DC	***	BAD BITS FRDM STATUS WD 2 MTCHK864
09E4	0	0000	00865	BAD5 DC	***	BAD 8BITS FROM STATUS WD 5 MTCHK865
2000			00866	WBUF EQU	/3000-/1000	RESERVE FOR WRITE BUFFER MTCHK866
1000			00867	R8UF EQU	WBUF-/1000	RESERVE FDR READ BUFFER MTCHK867
			00868	*****		
			00869	*	COMMAND CHAIN TD REWIND ALL XPDRTS MTCHK869	
			00870	*	XEQ FROM CONS INT AND RESET START MTCHK870	
			00871	*****		
09E5	0	1F40	00872	REW DC	/1F40	SELECT MTCHK872
09E6	0	0000	00873	DC	**	TRANSPORT NUMBER MTCHK873
09E7	0	2F50	00874	DC	/2F50	REW W/PROG INTERRUPT MTCHK874
09E8	0	0000	00875	DC	/0000	IGNRDRED MTCHK875
09E9	0	0400	00876	DC	/0400	SENSE COMMAND MTCHK876
09EA	0	0007	00877	DC	/7	NO. OF STATUS WORDS MTCHK877
09EB	0	0AA4	00878	DC	SENSE	WHERE TD PUT THEM MTCHK878
			00879	*****		
			00880	*****		
			00881	*****	MTA COMMAND CHAIN	*****MTCHK881
			00882	*****	NOTE: RETRYS ARE PERMITTED ON WRITE	*****MTCHK882
			00883	*****	TO TAPE ONLY.	*****MTCHK883
			00884	*****	PATCHES ARE SHOWN TD EITHER	*****MTCHK884
			00885	*****	INHIBIT DR PERMIT RETRYS.	*****MTCHK885
			00886	*****		*****MTCHK886
			00887	*****		MTCHK887
			00888	*****		MTCHK888
09EC	0	1F40	00889	SELECT DC	/1F40	SELECT AREA 13 MTCHK889
09ED	0	0000	00890	DC	**	XPORT AND MODE INSERTED HERE MTCHK890
09EE	0	0840	00891	DC	/0840	ALTERNATE COMMAND CHAIN MTCHK891
09EF	0	0AA0	00892	DC	SNSE	GO SENSE XPDRT MTCHK892
			00893	*****	ROUTINE 0	MTCHK893
09F0	0	2F50	00894	RTNO DC	/2F50	REWIND XPRTR (W/PRDG INT) MTCHK894
09F1	0	0000	00895	DC	**	MTCHK895
09F2	0	EB40	00896	DC	/EB40	SPACE REV RECORD MTCHK896
09F3	0	0001	00897	DC	1	MTCHK897
09F4	0	0401	00898	DC	/0401	SENSE MTCHK898
09F5	0	0051	00899	DC	/51	MTCHK899
09F6	0	0AA4	00900	DC	SENSE	MTCHK900

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09F7 0	5740	00901	RTN1	DC	/5740	WRITE RECORD GAP	MTCHK901
09F8 0	0001	00902		DC	1		MTCHK902
09F9 0	0840	00903		DC	/0840		MTCHK903
09FA 0	0AA0	00904		DC	SNSE		MTCHK904
09FB 0	0740	00905	RTN2	DC	/0740	WRITE FILE MARK	MTCHK905
09FC 0	0001	00906		DC	1		MTCHK906
09FD 0	0840	00907		DC	/0840		MTCHK907
09FE 0	0AA0	00908		DC	SNSE		MTCHK908
09FF 0	5740	00909	RTN3	DC	/5740	WRITE RECORD GAP	MTCHK909
0A00 0	0014	00910		DC	20		MTCHK910
0A01 0	0840	00911		DC	/0840		MTCHK911
0A02 0	0AA0	00912		DC	SNSE		MTCHK912
0A03 0	7B40	00913	RTN4	DC	/7B40	SPACE REVERSE FILE	MTCHK913
0A04 0	0001	00914		DC	1		MTCHK914
0A05 0	0840	00915		DC	/0840		MTCHK915
0A06 0	0AA0	00916		DC	SNSE		MTCHK916
0A07 0	EB40	00917	RTN5	DC	/EB40	SPACE REV RECORD	MTCHK917
0A08 0	0003	00918		DC	3		MTCHK918
0A09 0	0840	00919		DC	/0840		MTCHK919
0A0A 0	0AA0	00920		DC	SNSE		MTCHK920
0A0B 0	7B40	00921	RTN6	DC	/7B40	SPACE REV FILE	MTCHK921
0A0C 0	0001	00922		DC	1		MTCHK922
0A0D 0	0840	00923		DC	/0840		MTCHK923
0A0E 0	0AA0	00924		DC	SNSE		MTCHK924
0A0F 0	0740	00925	RTN7	DC	/0740	WRT FILE MARKS	MTCHK925
0A10 0	0014	00926		DC	20		MTCHK926
0A11 0	2F50	00927		DC	/2F50	REWIND W/PROG INT (ILSW 6)	MTCHK927
0A12 0	0000	00928		DC	**		MTCHK928
0A13 0	0840	00929		DC	/0840		MTCHK929
0A14 0	0AA0	00930		DC	SNSE		MTCHK930
0A15 0	0140	00931	RTN8	DC	/140	WRITE TO TAPE	MTCHK931
0A16 0	0800	00932		DC	/800		MTCHK932
0A17 0	2000	00933		DC	WBUF		MTCHK933
0A18 0	0140	00934		DC	/140	WRT RECORD TO EDIT	MTCHK934
0A19 0	07FE	00935		DC	/7FE	BYTE COUNT	MTCHK935
0A1A 0	2004	00936		DC	WBUF+4		MTCHK936
0A1B 0	0140	00937		DC	/140	WRT	MTCHK937
0A1C 0	0800	00938		DC	/800		MTCHK938
0A1D 0	2000	00939		DC	WBUF		MTCHK939
0A1E 0	EB40	00940		DC	/EB40	SPACE REV 2 RECORDS	MTCHK940
0A1F 0	0002	00941		DC	2		MTCHK941
0A20 0	0840	00942		DC	/840		MTCHK942
0A21 0	0AA0	00943		DC	SNSE		MTCHK943
0A22 0	0640	00944	RTN9	DC	/0640	READ FORWARD	MTCHK944
0A23 0	07FE	00945		DC	/7FE		MTCHK945
0A24 0	1000	00946		DC	RBUF		MTCHK946
0A25 0	2540	00947		DC	/2540	EDIT FROM HOST	MTCHK947
0A26 0	07FE	00948		DC	/7FE		MTCHK948
0A27 0	2000	00949		DC	WBUF		MTCHK949
0A28 0	EB40	00950		DC	/EB40	SPACE REV RECORD	MTCHK950
0A29 0	0001	00951		DC	1		MTCHK951
0A2A 0	0840	00952		DC	/840		MTCHK952
0A2B 0	0AA0	00953		DC	SNSE		MTCHK953
0A2C 0	EB40	00954	RTN4	DC	/EB40	SPACE REV RECORD	MTCHK954

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0A2D 0	0001	00955	DC	1	MTCHK955	
0A2E 0	0840	00956	DC	/840	MTCHK956	
0A2F 0	0AA0	00957	DC	SNSE	MTCHK957	
0A30 0	0640	00958	RTNB DC	/0640	READ FORWARD (3 TIMES)	MTCHK958
0A31 0	0800	00959	DC	/800	BT CT CHANGED (800, 07FE, 08)	MTCHK959
0A32 0	1000	00960	DC	RBUF		MTCHK960
0A33 0	0840	00961	DC	/840		MTCHK961
0A34 0	0AA0	00962	DC	SNSE		MTCHK962
0A35 0	2F40	00963	RTNC DC	/2F40	REWIND	MTCHK963
0A36 0	0000	00964	DC	*--*		MTCHK964
0A37 0	0140	00965	DC	/140	WRT	MTCHK965
0A38 0	0800	00966	DC	/800		MTCHK966
0A39 0	2008	00967	DC	WBUF+8		MTCHK967
0A3A 0	0140	00968	DC	/140	WRT	MTCHK968
0A3B 0	0700	00969	DC	/700		MTCHK969
0A3C 0	2004	00970	DC	WBUF+4		MTCHK970
0A3D 0	0140	00971	DC	/140	WRT	MTCHK971
0A3E 0	0400	00972	DC	/400		MTCHK972
0A3F 0	2002	00973	DC	WBUF+2		MTCHK973
0A40 0	0140	00974	DC	/140	WRT RECORD TO SEARCH FOR IN	MTCHK974
0A41 0	0200	00975	DC	/200	BYTE COUNT	MTCHK975
0A42 0	2000	00976	DC	WBUF		MTCHK976
0A43 0	0140	00977	DC	/140	WRT ANDTHER	MTCHK977
0A44 0	0100	00978	DC	/100		MTCHK978
0A45 0	2003	00979	DC	WBUF+3		MTCHK979
0A46 0	0140	00980	DC	/140	WRT	MTCHK980
0A47 0	0800	00981	DC	/800		MTCHK981
0A48 0	2005	00982	DC	WBUF+5		MTCHK982
0A49 0	2F50	00983	DC	/2F50	REWIND (W/PRDG INT)	MTCHK983
0A4A 0	0000	00984	DC	--*		MTCHK984
0A4B 0	0840	00985	DC	/840		MTCHK985
0A4C 0	0AA0	00986	DC	SNSE		MTCHK986
0A4D 0	3540	00987	RTND DC	/3540	WRT COMPARE BUFFER	MTCHK987
0A4E 0	0028	00988	DC	40	WITH MAX BYTE COUNT	MTCHK988
0A4F 0	2007	00989	DC	WBUF+7		MTCHK989
0A50 0	9840	00990	DC	/9840	SEARCH FDR RECORD	MTCHK990
0A51 0	000E	00991	DC	/E	STARTING WITH 14TH BYTE	MTCHK991
0A52 0	E840	00992	DC	/E840	SPACE REV RECORD	MTCHK992
0A53 0	0001	00993	DC	1		MTCHK993
0A54 0	0640	00994	DC	/0640	READ FORWARD	MTCHK994
0A55 0	0200	00995	DC	/200		MTCHK995
0A56 0	1000	00996	DC	RBUF		MTCHK996
0A57 0	0840	00997	DC	/840		MTCHK997
0A58 0	0AA0	00998	DC	SNSE		MTCHK998
0A59 0	0140	00999	RTNE DC	/140	WRT	MTCHK999
0A5A 0	07EE	01000	DC	/07EE		MTCHK000
0A5B 0	2000	01001	DC	WBUF		MTCHK001
0A5C 0	0E40	01002	DC	/0E40	READ REV	MTCHK002
0A5D 0	0100	01003	DC	/0100	WITH WRONG BYTE COUNT	MTCHK003
0A5E 0	1000	01004	DC	RBUF		MTCHK004
0A5F 0	0840	01005	DC	/840		MTCHK005
0A60 0	0AA0	01006	DC	SNSE		MTCHK006
0A61 0	D740	01007	RTNF DC	/D740	WRT FILE MARK	MTCHK007
0A62 0	0001	01008	DC	1		MTCHK008

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0A63	0	0E40	01009	DC	/0E40	READ REVERSE	MTCHK009
0A64	0	0002	01010	DC	2		MTCHK010
0A65	0	1000	01011	OC	RBUF		MTCHK011
0A66	0	0840	01012	DC	/840		MTCHK012
0A67	0	0AA0	01013	DC	SNSE		MTCHK013
0A68	0	1540	01014	RTN10	OC	/1540	WRT HOST TD 2K LOCAL BUFFER
0A69	0	0840	01015	DC	/0840	W/BYTE COUNT TDD LARGE	MTCHK014
0A6A	0	2000	01016	DC	WBUF		MTCHK015
0A6B	0	0840	01017	DC	/0840		MTCHK016
0A6C	0	0AA0	01018	DC	SNSE		MTCHK017
0A6D	0	5740	01019	RTN11	DC	/5740	WRT RECDRD GAP
0A6E	0	0100	01020	DC	/100		MTCHK019
0A6F	0	0E40	01021	DC	/0E40	READ REV	MTCHK020
0A70	0	0100	01022	DC	/100		MTCHK021
0A71	0	1000	01023	DC	RBUF		MTCHK022
0A72	0	0840	01024	DC	/840		MTCHK023
0A73	0	0AA0	01025	DC	SNSE		MTCHK024
0A74	0	1560	01026	RTN12	DC	/1560	WRT HDST TO LOCAL BUFFER
0A75	0	0100	01027	OC	/100	W/ CHAIN DATA	MTCHK026
0A76	0	2000	01028	DC	WBUF		MTCHK027
0A77	0	1560	01029	DC	/1560	WRT - CHAIN DATA	MTCHK028
0A78	0	0100	01030	DC	/100		MTCHK029
0A79	0	2080	01031	DC	WBUF+/80		MTCHK030
0A7A	0	1540	01032	DC	/1540	WRT	MTCHK031
0A7B	0	0100	01033	DC	/100		MTCHK032
0A7C	0	2100	01034	DC	WBUF+/100		MTCHK033
0A7D	0	0740	01035	OC	/0740	WRT LOCAL BUFFER TO TAPE	MTCHK034
0A7E	0	0300	01036	DC	/300	BYTE COUNT	MTCHK035
0A7F	0	0840	01037	DC	/840		MTCHK036
0A80	0	0AA0	01038	DC	SNSE		MTCHK037
0A81	0	0E40	01039	RTN13	DC	/0E40	READ REV TAPE TO HDST
0A82	0	0300	01040	DC	/300	THE CHAINED DATA OF PREV	RMTCHK040
0A83	0	1000	01041	DC	RBUF		MTCHK041
0A84	0	0840	01042	DC	/840		MTCHK042
0A85	0	0AA0	01043	DC	SNSE		MTCHK043
0A86	0	0140	01044	RTN14	DC	/0140	WRT HOST TD TAPE, W/RETRY
		01045	*			(PATCH TD /0540 TD INHIBIT	RMTCHK044
0A87	0	1000	01046	DC	/1000	BYTE COUNT	MTCHK045
0A88	0	2000	01047	DC	WBUF		MTCHK046
0A89	0	EB40	01048	DC	/EB40	BACKSPACE	MTCHK047
0A8A	0	0001	01049	DC	1	DNE RECORD	MTCHK048
0A8B	0	0640	01050	DC	/0640	READ TAPE TD HDST (/240)	MTCHK049
0A8C	0	1000	01051	DC	/1000	BYTE COUNT	MTCHK050
0A8D	0	1000	01052	DC	RBUF		MTCHK051
0A8E	0	0840	01053	DC	/0840	GD SENSE	MTCHK052
0A8F	0	0AA0	01054	DC	SNSE		MTCHK053
0A90	0	1540	01055	RTN15	DC	/1540	WRITE HOST TO LOCAL BUFFER
0A91	0	0800	01056	DC	/800	BYTE COUNT	MTCHK054
0A92	0	2000	01057	DC	WBUF		MTCHK055
0A93	0	0740	01058	DC	/0740	WRT LB TO TAPE, W/RETRY	(1740 W/MTCHK056
0A94	0	0800	01059	DC	/800	BYTE COUNT	MTCHK057
0A95	0	0840	01060	DC	/0840	GD SENSE	MTCHK058
0A96	0	0AA0	01061	DC	SNSE		MTCHK059
0A97	0	3B40	01062	RTN16	DC	/3B40	READ REV TAPE TO LB (/2B40)MTCHK060

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0A98	0	0800	01063	DC	/800	BYTE COUNT	MTCHK063
0A99	0	1540	01064	OC	/1640	RO FWD LB TO HDST	(/1240)MTCHK064
0A9A	0	0800	01065	DC	/800	BYTE COUNT	MTCHK065
0A9B	0	1000	01066	DC	RBUF		MTCHK066
0A9C	0	0840	01067	DC	/0840	GO SENSE	MTCHK067
0A9D	0	0AA0	01068	OC	SNSE		MTCHK068
0A9E	0	2F40	01069	RTN17	DC	/2F40	REWIND W/IMMEDIATE INTERRUPTMTCHK069
0A9F	0	0000	01070	DC	***	FALL THRU TO SENSE COMMAND	MTCHK070
			01071	*****	SENSE	*****	***** MTCHK071
0AA0	0	0401	01072	SNSE	DC	/0401	SENSE COMMAND
0AA1	0	0051	01073	DC	/51	NUMBER OF WORDS TO TRANSFER	MTCHK073
0AA2	0	0AA4	01074	DC	SENSE	THE PLACE TO PUT THEM	MTCHK074
0AA4	0	0000	01075	BSS	E 0		MTCHK075
			01076	*****	*****	*****	***** MTCHK076
			01077	*	MTA STATUS WORDS ARE PUT HERE	*	MTCHK077
			01078	*****	*****	*****	***** MTCHK078
0AA4	0	0051	01079	SENSE	BSS	/51	MTCHK079
0AF6	0	0200	01080	END	TDP		MTCHK080

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## CROSS-REFERENCE

SYMBOL	VALUE	REL	DEFN	REFERENCES
ADVAN	02E6	0	00192	00202,B 00203,B 00204,B 00205,B 00206,B 00207,B 00208,B 00209,B 00210,B 00214,B 00217,B 00233,B 00235,B 00240,B 00241,B 00242,B 00246,B 00253,B 00258,B 00279,B 00284,B 00356,B
AD10	0366	0	00267	00261,B 00263,B 00266,B
AD2	0362	0	00264	00262,B
AGAIN	02A4	0	00143	00198,B 00213,B 00230,B 00272,B 00275,B 00283,B
BAD1	09E2	0	00863	00173,M 00177,R 00327,R
BAD2	09E3	0	00264	00176,M 00332,R
BAD5	09E4	0	00865	00238,M 00337,R 00346,M
BITS	0456	0	00429	00308,B 00313,B 00319,B 00325,B 00441,B 00446,B
BR	09D0	0	00845	00021,R 00023,R
BYPAS	044C	0	00420	00425,B
CERRS	09D7	0	00852	00057,R 00064,M 00394,M
CKDR	0274	0	00103	00095,B 00114,B 00289,B
CNT	0574	0	00699	00497,R
CONS	0221	0	00046	00538,B
CONV	0486	0	00472	00049,B 00052,B 00055,B 00058,B 00303,B 00341,B 00344,B 00399,B 00405,B 00409,B 00413,B 00482,B 00483,B
CWD1	0523	0	00613	00171,R 00316,R
CWD2	053B	0	00637	00124,R 00127,M 00174,R 00322,R
DATA	09CE	0	00843	00035,R
EMSG	03E2	0	00347	00338,B
ENDOP	04C8	0	00526	00520,B
ERBIT	0475	0	00456	00453,B
ERROR	0413	0	00387	00371,B
FERRS	09D6	0	00851	00054,R 00063,M 00298,M
FIRST	09E1	0	00862	00366,M 00390,R 00393,M
FLAGS	046E	0	00451	00330,B 00335,B 00463,B 00468,B
FLGER	038D	0	00295	00178,B 00239,B
GO	02D9	0	00179	00358,B
HALT	09C2	0	00829	00091,R
HEX	09AA	0	00815	00432,R 00434,R 00477,R
H0010	09DD	0	00858	00267,R
HU200	09DE	0	00859	00185,R 00260,R
ILSW3	09E0	0	00861	00146,M 00184,R 00187,M 00518,M 00523,R
INIT	023C	0	00060	00025,R 00042,B
INT3	04B7	0	00515	00027,R 00528,B
INT4	04CD	0	00530	00029,R 00540,B
LP1	0218	0	00036	00039,B
LP3	0295	0	00124	00129,B
MODE	09D2	0	00847	00073,M 00083,R 00107,R 00119,R
MSG	0553	0	00666	00490,R 00492,R
MSG0	0595	0	00737	00666,R
MSG1	071F	0	00760	00667,R
MSG10	0813	0	00777	00676,R
MSG11	081F	0	00778	00677,R
MSG12	0824	0	00779	00678,R
MSG13	0825	0	00780	00679,R
MSG14	0826	0	00781	00680,R
MSG15	0827	0	00782	00681,R
MSG16	0828	0	00783	00682,R
MSG17	0829	0	00784	00683,R
MSG18	0849	0	00786	00684,R

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## CROSS-REFERENCE

SYMBOL	VALUE	REL DEFN	REFERENCES
MSG19	0860	0	00788 00685,R
MSG2	0757	0	00764 00668,R
MSG20	087C	0	00790 00686,R
MSG21	08A2	0	00793 00687,R
MSG22	08BE	0	00795 00688,R
MSG23	08E4	0	00798 00689,R
MSG24	0900	0	00800 00690,R
MSG25	0914	0	00802 00691,R
MSG26	0924	0	00803 00692,R
MSG27	0930	0	00804 00693,R
MSG28	0935	0	00805 00694,R
MSG29	095C	0	00808 00695,R
MSG3	0766	0	00765 00669,R
MSG30	0974	0	00810 00696,R
MSG31	098C	0	00812 00697,R
MSG32	09A4	0	00814 00698,R
MSG4	0784	0	00767 00670,R
MSG5	07A4	0	00759 00671,R
MSG6	07C7	0	00771 00672,R
MSG7	07CD	0	00772 00673,R
MSG8	0800	0	00775 00674,R
MSG9	0806	0	00776 00675,R
VBIT	046B	0	00444 00438,B
NO	042B	0	00402 00391,B
NXBIT	0483	0	00466 00460,B
NXT	0405	0	00372 00422,B 00424,B
OPR	03EE	0	00354 00359,B
PASS	09D4	0	00849 00048,R 00061,M 00285,M
PRGIN	02DB	0	00183 00090,B 00161,B 00164,B 00167,B 00186,B 00188,B
PROG	04C6	0	00525 00522,B
RBUF	1000	0	00867 00367,R 00376,M 00408,R 00946,R 00960,R 00996,R 01004,R 01011,R 01023,R 01041,R 01052,R 01066,R
RCOMP	03F8	0	00364 00218,B 00234,B 00247,B 00254,B 00280,B 00373,B 00381,B
RDSW	09CC	0	00839 00070,R 00354,R 00420,R
READY	09C4	0	00831 00086,R
RECD5	09DA	0	00855 00273,R 00281,R
REG	0443	0	00415 00387,M 00388,M 00389,M 00404,R 00407,R 00411,R
REGF	03E5	0	00349 00295,M 00296,M 00297,M
RESP	04AE	0	00503 00505,B
RESTO	04E3	0	00549 00527,B 00537,B 00539,B 00554,B
RETRY	09D5	0	00850 00051,R 00062,M 00155,M
REW	09E5	0	00872 00085,M 00831,R
REWD	025C	0	00083 00076,B 00097,B
RFLAG	09DB	0	00856 00500,M 00503,R 00533,M
ROUTN	050B	0	00589 00179,B
RST	098E	0	00825 00526,R
RSTPR	09C0	0	00827 00525,R
RTN	09D8	0	00853 00133,M 00158,R 00192,M 00193,R 00302,R 00315,R 00321,R 00352,R 00379,R 00398,R 00418,R
RTNA	0A2C	0	00954 00575,R
RTNAD	04F3	0	00565 00195,R
RTNB	0A30	0	00958 00225,M 00576,R
RTNC	0A35	0	00963 00577,R

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## CROSS-REFERENCE

SYMBOL	VALUE	REL	DEFN	REFERENCES
RTND	0A4D	0	00987	00578,R
RTNE	0A59	0	00999	00579,R
RTNF	0A61	0	01007	00580,R
RTNO	09F0	0	00894	00134,R 00565,R
RTN1	09F7	0	00901	00566,R
RTN10	0A68	0	01014	00581,R
RTN11	0A6D	0	01019	00582,R
RTN12	0A74	0	01026	00583,R
RTN13	0A81	0	01039	00243,R 00584,R
RTN14	0A86	0	01044	00249,M 00250,M 00255,R 00268,M 00269,M 00585,R
RTN15	0A90	0	01055	00586,R
RTN16	0A97	0	01062	00276,R 00587,R
RTN17	0A9E	0	01069	00588,R
RTN2	09F8	0	00905	00567,R
RTN3	09FF	0	00909	00568,R
RTN4	0A03	0	00913	00569,R
RTN5	0A07	0	00917	00570,R
RTN6	0A0B	0	00921	00571,R
RTN7	0A0F	0	00925	00572,R
RTN8	0A15	0	00931	00573,R
RTN9	0A22	0	00944	00574,R
RUTA	0308	0	00215	00599,R
RUTB	0311	0	00218	00600,R
RUTC	0328	0	00233	00601,R
RUTD	032D	0	00234	00602,R
RUTE	0331	0	00236	00603,R
RUTF	0339	0	00240	00604,R
RUTO	02F2	0	00202	00589,R
RUT1	02F4	0	00203	00590,R
RUT10	033B	0	00241	00605,R
RUT11	033D	0	00242	00606,R
RUT12	033F	0	00243	00607,R
RUT13	0346	0	00247	00608,R
RUT14	0353	0	00254	00609,R
RUT15	0371	0	00273	00610,R
RUT16	037D	0	00280	00611,R
RUT17	0386	0	00285	00612,R
RUT2	02F6	0	00204	00591,R
RUT3	02F8	0	00205	00592,R
RUT4	02FA	0	00206	00593,R
RUT5	02FC	0	00207	00594,R
RUT6	02FE	0	00208	00595,R
RUT7	0300	0	00209	00596,R
RUT8	0302	0	00210	00597,R
RUT9	0304	0	00211	00598,R
SAVA	04EE	0	00557	00543,M 00553,R
SAVE	04DC	0	00542	00516,B 00531,B 00547,B
SDWR	09C8	0	00835	00532,R
SELCT	09EC	0	00889	00108,M 00109,R 00823,R
SENSE	0AA4	0	01079	00088,R 00113,R 00144,M 00145,M 00149,R 00153,R 00236,R 00340,R 00878,R 00900,R 01074,R
SET	045F	0	00435	00433,B 00495,M
SETA	0477	0	00457	00455,B 00496,M

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CROSS-REFERENCE

SYMBOL	VALUE	REL DEFN	REFERENCES
SETUP	048E	0	00478 00494,M
SILSW	09C6	0	00833 00517,R
SNSE	0AA0	0	01072 00892,R 00904,R 00908,R 00912,R 00916,R 00920,R 00924,R 00930,R 00943,R 00953,R 00957,R 00962,R 00986,R 00998,R 01006,R 01013,R 01018,R 01025,R 01038,R 01043,R 01054,R 01061,R 01068,R
SPACE	098A	0	00816 00454,R 00456,R
START	098C	0	00823 00110,M 00111,R 00135,M 00147,R 00196,M
SWIT	09DF	0	00860 00071,R 00355,R 00421,R 00839,R
TMSG4	0258	0	00077 00074,B
TDP	0200	0	00021 01080,R
TUBE	04D9	0	00539 00536,B
TWD	09DC	0	00857 00248,R 00265,R
TYPE	0496	0	00489 00041,B 00047,B 00050,B 00053,B 00056,B 00059,B 00066,B 00069,B 00075,B 00078,B 00301,B 00304,B 00309,B 00314,B 00320,B 00326,B 00331,B 00336,B 00339,B 00342,B 00345,B 00348,B 00397,B 00400,B 00401,B 00403,B 00406,B 00410,B 00414,B 00509,B
UND	045D	0	00434 00431,B
VDT	09CA	0	00837 00491,M 00501,R 00502,M
WBUF	2000	0	00866 00036,M 00369,R 00412,R 00867,R 00933,R 00936,R 00939,R 00949,R 00967,R 00970,R 00973,R 00976,R 00979,R 00982,R 00989,R 01001,R 01016,R 01028,R 01031,R 01034,R 01047,R 01057,R
WORDS	09D9	0	00854 00216,M 00227,M 00232,M 00245,M 00252,M 00271,M 00278,M 00365,R 00374,R
WRITE	04A7	0	00499 00507,B
XPORT	09D3	0	00848 00094,M 00103,M 00104,R 00106,M 00122,R
XR1	04F0	0	00559 00544,M 00550,R
XR2	04F1	0	00560 00545,M 00551,R
XR3	04F2	0	00561 00546,M 00552,R

000 OVERFLW SECTORS SPECIFIED

000 OVERFLW SECTORS REQUIRED

173 SYMBOLS DEFINED

NO ERROR(S) AND NO WARNING(S) FLAGGED IN ABOVE ASSEMBLY